

IN THE CLAIMS

Claims 1 – 20 have been previously cancelled.

Following are the current claims; no claims are amended:

21. (Previously Presented) For use in a wireless network comprising a first base transceiver station capable of establishing and maintaining a plurality of communication links with a plurality of mobile stations by means of a plurality of data traffic channels and at least one overhead channel, an apparatus for allocating said plurality of data traffic channels comprising:

a failure detection circuit capable of detecting a failure in said at least one overhead channel of said first base transceiver station and generating a failure notification; and

a channel allocator capable of receiving said failure notification and, in response thereto:
1) terminating a first communication link between said first base transceiver station and a first selected one of said plurality of mobile stations, wherein said first selected mobile station maintains at least a second communication link with at least a second base transceiver station of said wireless network, and 2) reconfiguring a first data traffic channel associated with said terminated first communication link as a replacement overhead channel replacing said failed overhead channel.

22. (Previously Presented) The apparatus as set forth in Claim 21 wherein said channel allocator is capable of determining if one of said plurality of data traffic channels associated with said first base transceiver station is unused prior to terminating said first

communication link between said first base transceiver station and said first selected mobile station.

23. (Previously Presented) The apparatus as set forth in Claim 22 wherein said channel allocator reconfigures an unused one of said plurality of data traffic channels associated with said first base transceiver station as said replacement overhead channel in lieu of terminating said first communication link and reconfiguring said first data traffic channel associated with said terminated first communication link.

24. (Previously Presented) The apparatus as set forth in Claim 21 further comprising a memory coupled to said channel allocator, wherein said memory is capable of storing status data associated with said plurality of communication links maintained by said first base transceiver station with said plurality of a mobile stations.

25. (Previously Presented) The apparatus as set forth in Claim 24 wherein said status data comprises a received signal strength indicator associated with each of said plurality of communication links.

26. (Previously Presented) The apparatus as set forth in Claim 25 wherein said status data comprises handoff state data indicating whether each mobile station associated with each of

said communication links maintains communication links with at least two base transceiver stations.

27. (Previously Presented) The apparatus as set forth in Claim 26 wherein said channel allocator determines a weakest received signal strength indicator associated with one of said plurality of mobile stations maintaining communication links with at least two base transceiver stations.

28. (Previously Presented) The apparatus as set forth in Claim 27 wherein said channel allocator selects said communication link associated with said weakest received signal strength indicator to be said terminated first communication link.

29. (Previously Presented) A wireless network comprising:
a plurality of base transceiver stations, wherein each of said plurality of base transceiver stations is capable of establishing and maintaining a plurality of communication links with a plurality of mobile stations by means of a plurality of data traffic channels and at least one overhead channel; and

an apparatus associated with a first one of said base transceiver stations for allocating said plurality of data traffic channels associated with said first base transceiver station, said apparatus comprising:

a failure detection circuit capable of detecting a failure in said at least one overhead channel of said first base transceiver station and generating a failure notification; and

a channel allocator capable of receiving said failure notification and, in response thereto: 1) terminating a first communication link between said first base transceiver station and a first selected one of said plurality of mobile stations, wherein said first selected mobile station maintains at least a second communication link with at least a second one of said plurality of base transceiver stations of said wireless network, and 2) reconfiguring a first data traffic channel associated with said terminated first communication link as a replacement overhead channel replacing said failed overhead channel.

30. (Previously Presented) The wireless network as set forth in Claim 29 wherein said channel allocator is capable of determining if one of said plurality of data traffic channels associated with said first base transceiver station is unused prior to terminating said first communication link between said first base transceiver station and said first selected mobile station.

31. (Previously Presented) The wireless network as set forth in Claim 30 wherein said channel allocator reconfigures an unused one of said plurality of data traffic channels associated

with said first base transceiver station as said replacement overhead channel in lieu of terminating said first communication link and reconfiguring said first data traffic channel associated with said terminated first communication link.

32. (Previously Presented) The wireless network as set forth in Claim 29 further comprising a memory coupled to said channel allocator, wherein said memory is capable of storing status data associated with said plurality of communication links maintained by said first base transceiver station with said plurality of a mobile stations.

33. (Previously Presented) The wireless network as set forth in Claim 32 wherein said status data comprises a received signal strength indicator associated with each of said plurality of communication links.

34. (Previously Presented) The wireless network as set forth in Claim 33 wherein said status data comprises handoff state data indicating whether each mobile station associated with each of said communication links maintains communication links with at least two base transceiver stations.

35. (Previously Presented) The wireless network as set forth in Claim 34 wherein said channel allocator determines a weakest received signal strength indicator associated with

one of said plurality of mobile stations maintaining communication links with at least two base transceiver stations.

36. (Previously Presented) The wireless network as set forth in Claim 35 wherein said channel allocator selects said communication link associated with said weakest received signal strength indicator to be said terminated first communication link.

37. (Previously Presented) For use in a wireless network comprising a first base transceiver station capable of establishing and maintaining communication links with a plurality of mobile stations by means of a plurality of data traffic channels and at least one overhead channel, a method of allocating the plurality of data traffic channels comprising the steps of:

detecting a failure in the at least one overhead channel of the first base transceiver station;

in response to the failure detection, terminating a first communication link between the first base transceiver station and a first selected one of the plurality of mobile stations, wherein the first selected mobile station maintains at least a second communication link with at least a second base transceiver station; and

reconfiguring a first data traffic channel associated with the terminated first communication link as a replacement overhead channel replacing the failed overhead channel.

38. (Previously Presented) The method as set forth in Claim 37 further comprising the step of determining if one of the plurality of data traffic channels associated with the first base transceiver station is unused prior to terminating the first communication link between the first base transceiver station and the first selected mobile station.

39. (Previously Presented) The method as set forth in Claim 38 further comprising the step of reconfiguring an unused one of the plurality of data traffic channels associated with the first base transceiver station as the replacement overhead channel in lieu of terminating the first communication link and reconfiguring the first data traffic channel associated with the terminated first communication link.

40. (Previously Presented) The method as set forth in Claim 37 further comprising the steps of:

determining a weakest received signal strength indicator associated with one of a plurality of mobile stations maintaining communication links with the first base transceiver station and at least one other base transceiver station; and

selecting the communication link associated with the weakest received signal strength indicator to be the terminated first communication link.